

PNEUMOCOCCAL POLYSACCHARIDE VACCINE

What you need to know before you or your child gets the vaccine



**Immunization Program
Section of Epidemiology
3601 "C" Street, Suite 540
P.O. Box 240249
Anchorage, AK 99524-0249
907-269-8000**

WHAT IS PNEUMOCOCCAL DISEASE?

Streptococcus pneumoniae is a bacterium that causes much illness and death in the United States each year. This bacterium, also called the Pneumococcus, can cause serious infections of the lungs (pneumonia), the bloodstream (bacteremia), and the covering of the brain (meningitis). About 5 persons out of every 100 who get pneumococcal pneumonia, about 20 out of every 100 who get bacteremia, and about 30 out of every 100 who get meningitis die of the infections. Anyone can get pneumococcal disease; however, persons over 65 years of age, the very young, and persons of any age who have special types of health problems have the greatest risk.

People are more likely to die from pneumococcal disease if they have problems such as alcoholism, heart or lung disease, kidney failure, diabetes, or certain types of cancer. Older persons as a group are more likely to die from pneumococcal disease. Forty out of every 100 persons who have these special health problems die if they get pneumococcal meningitis. The high risk of death occurs in spite of treatment with drugs like penicillin. Because of the risk of serious complications from pneumococcal infection, vaccination is recommended for older persons and for children and adults with special health problems.

PNEUMOCOCCAL POLYSACCHARIDE VACCINE:

The pneumococcal polysaccharide vaccine contains material from the 23 types of pneumococcal bacteria that cause 88 percent of pneumococcal bacteremias. Most healthy adults who receive the vaccine develop protection against most or all of these types of pneumococcal bacteria 2-3 weeks after vaccination. Older persons and those with some long-term illnesses may not respond as well or at all. Children under 2 years of age are also not protected by the vaccine. The vaccine probably provides long-term protection for most people. However,

some people may lose protection about six years after vaccination and require revaccination. Persons in need of revaccination are discussed in the Revaccination section. The vaccine is given by injection.

WHO SHOULD RECEIVE THE VACCINE?

Vaccination is recommended for the following:

Adults:

1. All **adults aged 55 years and older** and **adults of all ages with previous serious pneumococcal infections** such as meningitis or sepsis (infection in the blood) or with long-term illnesses that are associated with a high risk of getting pneumococcal disease, including those with heart or lung diseases, diabetes, alcoholism, cirrhosis, or leaks of cerebrospinal fluid (CSF, the fluid surrounding the brain and spinal cord).
2. Adults with diseases that lower the body's resistance to infections or who are taking drugs that lower the body's resistance to infections, including those with abnormal function or removal of the spleen, Hodgkin's disease, lymphoma, multiple myeloma, kidney failure, nephrotic syndrome (a type of kidney disease) or conditions such as organ transplantation.
3. Adults with and without symptoms who are infected with the AIDS virus (HIV infection).

Children:

1. Children **2 years of age and older with previous serious pneumococcal infections such as meningitis or sepsis (infection in the blood)** or with long-term illnesses that are associated with a high risk of getting serious pneumococcal infections. This includes children with abnormal function or removal of the spleen, as well as those who have sickle cell disease, nephrotic syndrome (a type of kidney disease), or CSF leaks

(leaks of cerebrospinal fluid which surrounds the brain and spinal cord), or who have diseases that lower the body's resistance to infections or are taking drugs that lower the body's resistance to infections.

2. Children 2 years of age and older infected with the AIDS virus, both with and without symptoms.

(Note-Frequent disease of the upper respiratory system, including infections of the ear or sinuses, in children who are otherwise healthy, are not reasons to use this vaccine.)

SPECIAL GROUPS:

Persons living in special places or settings, such as certain Native American (i.e., American Indians) populations, have a high risk of pneumococcal disease. Because other Alaskans also live in similar places or settings, we believe they may also be at increased risk of pneumococcal disease. The Alaska Division of Public Health recommends similar use of pneumococcal vaccine for all Alaskans.

GENERAL CONSIDERATIONS:

Although this vaccine may not be as effective in some persons, especially those who do not have normal resistance to infections, vaccination is still recommended for such persons because they are at high risk of developing severe disease.

If there is doubt as to whether or not a person for whom vaccine is indicated has previously received pneumococcal vaccine, administration of vaccine is recommended.

POSSIBLE SIDE EFFECTS:

About half of those who are given pneumococcal vaccine have very mild side effects, such as redness and pain at the injection site. Less than 1 percent of those given pneumococcal vaccine may develop fever, muscle aches, and severe local reactions. Serious side effects, such as severe allergic reactions, have rarely been reported. Revaccination after periods longer than 13 months from the first vaccination has not been shown to increase the occurrence of side effects. As with any drug or vaccine, there is a rare possibility that allergic or more serious reactions or even death could occur.

REVACCINATION:

Revaccination should be considered for certain groups:

1. Persons at highest risk of fatal pneumococcal infection, such as those with abnormal function or removal of the spleen who received the original pneumococcal vaccine (between 1977 and 1983), or who received the current vaccine (available from 1983 to the present) 6 or more years ago.

2. Other persons shown to lose protection rapidly, such as persons with nephrotic syndrome, kidney failure, or transplants, who received the current vaccine (available from 1983 to the present) 6 or more years ago.
3. Children aged 10 years or younger with nephrotic syndrome, abnormal function or removal of the spleen, or sickle cell anemia who received the vaccine 3 to 5 years ago.
4. **Although studies have not documented an excessive risk of fatal pneumococcal infection in Alaskans, a high rate of infection has been documented in Alaska Natives. The Alaska Division of Public Health recommends that all Alaskans for whom pneumococcal vaccine is indicated should be revaccinated every 6 years.**

PREGNANCY:

The safety of pneumococcal vaccine for pregnant women has not been studied. It should not be given to healthy pregnant women. Women who are at high risk for pneumococcal disease and who are candidates for pneumococcal vaccine ideally should be vaccinated before pregnancy.

QUESTIONS:

If you have any questions about pneumococcal disease or pneumococcal polysaccharide vaccine, please ask now or call your doctor or health department.

REACTIONS:

If the person who received the vaccine gets sick and visits a doctor, hospital, or clinic during the 4 weeks after receiving the vaccine, please report it to:



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